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10/033,203	12/26/2001	Kenneth S. Walley	B-64424C (044368/0474)	9960

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EXAMINER

VUONG, QUOCHIE B

ART UNIT PAPER NUMBER

2685

DATE MAILED: 06/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/033,203

Applicant(s)

WALLEY, KENNETH S.

Examiner

Quochien B Vuong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Double Patenting

1 The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 21-32 and 34-40 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,360,085. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Regarding claims 21-30, claims 1-10 of U.S. Patent No. 6,360,085, respectively, encompass all the limitations including a system for receiving a signal comprising: a receiver operable to receive the signal; an interference avoidance system coupled to the receiver, the interference avoidance system turning the receiver off and on at a controllable frequency; and wherein the interference avoidance system applies a first

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duty cycle if interference is present and a second duty cycle if interference is not present; the receiver further comprises a plurality of stages, and the duty cycle system is coupled to two or more of the plurality of stages, and the duty cycle system is operable to turn each of the two or more of the plurality of stages off and on at a separately-controllable frequency; a mixer stage operable to change the frequency of the signal; a band pass stage coupled to the mixer stage, the band pass stage operable to filter the signal; an automatic gain control stage coupled to the band pass stage, the automatic gain control stage operable to control the gain of amplification of the signal; and wherein the duty cycle system is coupled to the mixer stage and the automatic gain control stage, the duty cycle system is operable to turn the mixer stage on and off at a first frequency, and to turn the automatic gain control stage on and off at a second frequency; wherein the signal strength system comprises a signal power meter; wherein the interference avoidance system is operable to determine whether the magnitude of the signal output changes for a corresponding change in a duty cycle of the duty cycle system and to receive duty cycle data from the duty cycle system and to select a duty cycle for the duty cycle system based upon the signal output.

Regarding claims 31, 32, and 34, claims 11-14 of U.S. Patent No. 6,360,085 encompass all the limitations including a system for avoiding interference comprising: a signal input receiving a signal and determining whether interference is present; and a receiver cycling output outputting control data for turning a receiver on and off based on whether interference is present; wherein the signal has been processed by a receiver; wherein the signal cycling output generates duty cycle control data.

Regarding claims 35-40, claims 15-20 of U.S. Patent No. 6,360,085 encompass all the limitations including a method for processing a signal comprising: receiving interference status data; cycling a receiver component according to a first duty cycle if the interference status data indicates that the signal includes a noise signal; wherein the receiver component is a mixer or an automatic gain control system; wherein the first duty cycle is a preset duty cycle; the method further comprising adjusting the first duty cycle so as to reduce noise amplification; and wherein the interference status data is generated by a signal strength system.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 21, 22, 25, 27-32, and 34-40 are rejected under 35 U.S.C. 102(b) as being anticipated by DeLuca et al. (US 5448,756).

Regarding claim 21, DeLuca et al. disclose (figure 1) a system for receiving a signal comprising: a receiver operable to receive the signal; an interference avoidance system coupled to the receiver, the interference avoidance system turning the receiver off and on at a controllable frequency; and wherein the interference avoidance system

applies a first duty cycle if interference is present and a second duty cycle if interference is not present (column 3, lines 10-60; column 4, lines 36-64).

Regarding claims 22, 25, 27-29, Delucas et al. further disclose the receiver further comprises a plurality of stages; wherein the signal strength system comprises a signal power meter; wherein the interference avoidance system is operable to determine whether the magnitude of the signal output changes for a corresponding change in a duty cycle of the duty cycle system and to receive duty cycle data from the duty cycle system and to select a duty cycle for the duty cycle system based upon the signal output (column 3, lines 10-60; column 4, lines 36-64; column 5, lines 23-51; and figures 1-2).

Regarding claim 31, DeLuca et al. (figure 1) disclose a system for avoiding interference comprising: a signal input receiving a signal and determining whether interference is present; and a receiver cycling output outputting control data for turning a receiver on and off based on whether interference is present (column 3, lines 10-60; column 4, lines 36-64).

Regarding claims 32 and 34, DeLuca et al. disclose wherein the signal has been processed by a receiver; wherein the signal cycling output generates duty cycle control data (column 3, lines 10-60; column 4, lines 36-64).

Regarding claim 35, DeLuca et al. disclose (figure 1) a method for processing a signal comprising: receiving interference status data; cycling a receiver component according to a first duty cycle if the interference status data indicates that the signal includes a noise signal (column 3, lines 10-60; column 4, lines 36-64).

Regarding claims 36-40, DeLuca et al. disclose the component is a mixer or an automatic gain control system; wherein the first duty cycle is a preset duty cycle; the method further comprising adjusting the first duty cycle so as to reduce noise amplification; and wherein the interference status data is generated by a signal strength system (column 3, lines 10-60; column 4, lines 36-64; column 5, lines 23-51; and figures 1-2).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 26 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeLuca et al.

Regarding claim 26, DeLuca et al. disclose the duty cycle system coupled to line (55) for controlling the gain of the amplifiers (12 and 18) (see figure 1). Although DeLuca et al. do not disclose an automatic gain control stage controlling a gain of amplification of the signal, and a duty cycle system coupled to the automatic gain control stage and turning the automatic gain control stage on and off. However, the examiner takes Official notice that an automatic gain control stage for controlling a gain of amplification of the signal is well known in the art. Therefore, it would have been

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obvious for one having ordinary skill in the art at the time the invention was made to adapt the well known automatic gain control stage to the system of DeLuca et al. for automatically controlling the gain of the amplifier(s).

Regarding claim 33, DeLuca et al. do not disclose the signal is a spread spectrum signal. However, examiner takes Official notice that spread spectrum signal is well known in communications system. Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the spread spectrum signal to the system of DeLuca et al. as a system design preference for use in spread spectrum environment.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Owen (US 5,241,691) discloses a method of optimizing the transmission of idle beacon messages and a communications system using the method.

8. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121
Crystal Drive, Arlington, VA 22202. Sixth Floor (Receptionist).

Any inquiry concerning this communication from the examiner should be directed to Quochien B. Vuong whose telephone number is (703) 306-4530. The examiner can normally be reached on Monday through Friday from 9:30 a.m. to 6:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached on (703) 305-4385.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service whose telephone number is (703) 306-0377.


QUOCHIE B. VUONG
PRIMARY EXAMINER

Quochien B. Vuong
June 10, 2004.